EAST Search History

EAST Search History (Prior Art)

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|----------|------|------------------------------------|---|---------------------|---------|---------------------|
| S1 | 937 | 257/421.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:15 |
| 82 | 2617 | 257/295.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:18 |
| S3 | 29 | 257/ E43.001.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:22 |
| S4 | 371 | 257/ E43.005.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:26 |
| S5 | 24 | 257/E29.167.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 14:32 |
| S6 | 191 | 257/ E29.323.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:32 |
| S7 | 3829 | (S1 or S2 or S3 or S4 or S5 or S6) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:33 |
| S8 | 1 | S7 and (wall\$1motion) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:34 |
| S9 | 24 | S7 and (wall motion) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 14:53 |
| S10 | 14 | Se and antiparallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2008/12/01 15:00 |

DRe

Default Plurals Time

| S11 | 80 | ferromagnet\$5 and wall motion and antiparallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:05 |
|-----|-----|---|---|-----|----|---------------------|
| S12 | 35 | S11 and intermediate | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:10 |
| S13 | 61 | S11 and (intermediate or third) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:10 |
| S14 | 28 | S11 and (intermediate or third) layer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:11 |
| S15 | 4 | S11 and ((intermediate or third) layer near magnetic) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:14 |
| S16 | 5 | "3717504".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:24 |
| S17 | 3 | "3840898",pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:30 |
| S18 | 0 | switching a spin valve back and forth by current-induced domain wall motion | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:31 |
| S19 | 0 | switching a spin valve back and forth | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/01 15:31 |
| S20 | 174 | ("4103315").URPN. | USPAT | ADJ | ON | 2008/12/01 15:34 |
| S21 | 0 | S20 and spin transfer | USPAT | ADJ | ON | 2008/12/01 16:54 |
| S22 | 95 | S20 and spin | USPAT | ADJ | ON | 2008/12/01 16:54 |
| S23 | 50 | S22 and antiparallel | USPAT | ADJ | ON | 2008/12/01 16:56 |
| S24 | 24 | S23 and wall | USPAT | ADJ | ON | 2008/12/01 16:57 |
| S25 | 0 | S23 and wall motion | USPAT | ADJ | ON | 2008/12/01 16:58 |
| S26 | 0 | S23 and wall-motion | USPAT | ADJ | ON | 2008/12/01 |

| | | | | | | 16:58 |
|-------------|------|---|---|-----|----|---------------------|
| S27 | 13 | (US-7005852-\$ or US-6713195-\$ or US-6724852-\$ or US-3576552-\$ or US-5331728-\$ or US-4103315-\$ or US-3717504-\$ or US-3840889-\$ or US-5134533-\$ or US-5390061-\$ or US-6807031-\$ or US-6456467-\$ or US-6479449-\$), did. | USPAT | ADJ | ON | 2008/12/02 09:54 |
| S28 | 2 | S27 and GaAs | USPAT | ADJ | ON | 2008/12/02 09:55 |
| S29 | 7 | S27 and Mn | USPAT | ADJ | ON | 2008/12/02 09:56 |
| S30 | 3 | S27 and pulse | USPAT | ADJ | ON | 2008/12/02 11:06 |
| S31 | 939 | 257/421.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S32 | 2621 | 257/295.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S33 | 29 | 257/E43.001.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S34 | 371 | 257/E43.005.cols. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S3 5 | 24 | 257/E29.167.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S36 | 191 | 257/E29.323.cols. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S37 | 3835 | (S31 or S32 or S33 or S34 or S35 or S36) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S38 | 135 | S37 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S39 | 112 | S38 and ferromagnetic | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 13:55 |
| S40 | 94 | S39 and (three or third or intermediate) | US-PGPUB; USPAT; | ADJ | ON | 2008/12/02 13:56 |

| | | | EPO; JPO; DERWENT; IBM_TDB | | |
|-----|-----|---|---|----|---------------------|
| S41 | 31 | S39 and (three or third or intermediate) layer | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 13:56 |
| S42 | 31 | S39 and ((three or third or intermediate) layer or magnetic trilayer) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 13:58 |
| S43 | 31 | S39 and (((three or third or intermediate) layer or magnetic trilayer) or three ferromagnetic layers) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 13:59 |
| S44 | 2 | 20030209770* | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:15 |
| S45 | 18 | ferromagnetic and ("In.sub.x") | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:25 |
| S46 | 0 | ferromagnetic and ("In.sub.x" "Mn.sub.x") | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:26 |
| S47 | 5 | ("In.sub.x" and "Mn.sub.x") | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:26 |
| S48 | 106 | ("In.sub.x" and Mn) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:27 |
| S49 | 5 | ("In.sub.x" and Mn) and ferromagnetic | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 14:27 |
| S50 | 4 | current induc\$3 (domain wall or DW) motion | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 15:45 |
| S51 | 4 | current induced (domain wall or DW) motion | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2008/12/02 15:46 |
| S52 | 519 | (domain wall or DW) motion | US-PGPUB; ADJ USPAT; | ON | 2008/12/02 15:46 |

| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
|-----|------|--|---|-----|----|---------------------|
| S53 | 282 | S52 and ferromagnetic | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:46 |
| S54 | 68 | S53 and (three or third or intermediate) layer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:46 |
| S55 | 20 | S37 and domain wall motion | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:50 |
| S56 | 21 | S37 and domain wall (motion or movement) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:52 |
| S57 | 14 | [US-20030209770-3], did. or (US-7005852-\$ or US- 6713195-\$ or US-6724652-\$ or US-5376552-\$ or US- 5331728-\$ or US-4103315-\$ or US-53707504-\$ or US- 3840898-\$ or US-5134533-\$ or US-5390061-\$ or US- 6807031-\$ or US-6456467-\$ or US-639047949-\$), did. | US-PGPUB; USPAT | ADJ | OS | 2008/12/02 15:55 |
| S58 | 519 | domain wall motion | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:56 |
| S59 | 282 | S58 and ferromagnetic | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:56 |
| S60 | 75 | S53 and ((three or third or intermediate) layer or trilayer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 15:57 |
| S61 | 1606 | magnetic domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 16:16 |
| S62 | 658 | S61 and ferromagnetic | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 16:16 |
| S63 | 188 | S62 and (((three or third or intermediate) layer or magnetic trilayer) or three ferromagnetic layers) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/02 16:16 |
| S64 | 55 | \$83 and antiparallel | US-PGPUB; USPAT; | ADJ | ON | 2008/12/02 17:03 |

| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
|-----|------|---|---|-----|----|---------------------|
| S65 | 1606 | magnetic domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/03 14:42 |
| S66 | 658 | S65 and ferromagnetic | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/03 14:42 |
| S67 | 188 | S66 and (((three or third or intermediate) layer or magnetic trilayer) or three ferromagnetic layers) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/03 14:42 |
| S68 | 55 | S67 and antiparallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/03 14:42 |
| S69 | 15 | S68 and different material | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/03 14:42 |
| S70 | 16 | (US-20030209770-\$ or US-20010007532-\$) did. or (US- 7005852-\$ or US-6713195-\$ or US-6724652-\$ or US- 3676552-\$ or US-5331728-\$ or US-403315-\$ or US- 3717504-\$ or US-3840898-\$ or US-5134533-\$ or US- 5390061-\$ or US-6807031-\$ or US-6456467-\$ or US- 6437949-\$ or US-6169646-\$) did. | US-PGPUB; USPAT | ADJ | ON | 2008/12/04 14:17 |
| S71 | 1 | "5734605".pn. | US-PGPUB; USPAT | ADJ | ON | 2008/12/04 14:34 |
| S72 | 2 | "5734605",pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/04 16:28 |
| S73 | 2 | "5768181".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/04 16:28 |
| S74 | 2 | "5294287".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/12/04 16:29 |
| S75 | 1 | ("2003/0209770").URPN. | USPAT | ADJ | ON | 2009/07/08 16:42 |
| S76 | 94 | ferromagnet\$5 and (wall near10 move) and antiparallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:44 |
| S77 | 127 | ferromagnet\$5 and (wall near10 move) and | US-PGPUB; | ADJ | ON | 2009/07/13 |

| | | anti\$1parallel | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | 09:46 |
|-------------|------|---|---|-----|----|---------------------|
| S78 | 1028 | 257/421 cols. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S79 | 2718 | 257/295.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S80 | 38 | 257/E43.001.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S81 | 416 | 257/E43.005.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S82 | 30 | 257/E29.167.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S83 | 251 | 257/E29.323.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2009/07/13 09:46 |
| S84 | 4072 | (S78 or S79 or S80 or S81 or S82 or S83) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S 85 | 4072 | S84 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S86 | 150 | S85 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:46 |
| S87 | 9842 | 257/81,82,116,117,432-437,457,459,749,421-422.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:51 |
| S88 | 59 | S87 and ferromagnet\$5 and (anti\$1parallel or anti\$1ferromagnet\$5) and domain wall and current | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB | ADJ | ON | 2009/07/13 09:51 |

| | | | USPAT; EPO; JPO; DERWENT; IBM_TDB | | | 09:53 |
|------|------|--|---|-----|----|---------------------|
| S90 | 4 | ("5629549" "5652445" "5962905").PN. OR ("6696737").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 09:54 |
| S91 | 75 | S87 and domain wall and current | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:55 |
| S92 | 303 | S87 and domain and current | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:55 |
| S93 | 25 | S92 and (\domain same move) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:56 |
| S94 | 25 | S92 and (domain same move) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:56 |
| S95 | 7246 | 257/295, E43.001-E43.007, E27.005- E27.006, E27.008, E29.164, E29.167, E29.272, E29.323.ods. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:58 |
| S96 | 1208 | S95 and domain | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:59 |
| S97 | 87 | See and (domain same move) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 09:59 |
| S98 | 895 | S96 and S96 and ferromagnet\$5 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:00 |
| S99 | 586 | S98 and anti\$1parallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:00 |
| S100 | 577 | S99 and current | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2009/07/13 10:02 |
| S101 | 20 | ("4949039" "5134533" "5251088" "5343422" "5411814" "5432373" "5461308" "5475550" "5508867").PN. OR ("5835003").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 10:04 |

| S102 | 1 | (*6834005".pn. | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:10 |
|---------------|-----|--|---|-----|----|---------------------|
| S103 | 32 | ["20020101761" "20030107839" "20030128460" "3333255" "3369225" "3611328" "3846770" "3868659" "3997885" "4075612" "4075613" "4080591" "4192012" "4198919" "4250566" "4253160" "4253160" "4450363" "5569058" "5729410" "5801984").PN. OR ("6834005").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 10:10 |
| S104 | 1 | 20030197984" | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:12 |
| S1 0 5 | 0 | S104 and domain wall | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:12 |
| S106 | 1 | \$104 and domain | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:12 |
| S107 | 0 | 2004/0136232 | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:13 |
| S108 | 1 | "20040136232" | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:13 |
| S109 | 2 | "20050018478" | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:13 |
| S110 | 2 | 20050207073* | US-PGPUB; USPAT; USOOR | ADJ | ON | 2009/07/13 10:14 |
| S111 | 341 | S100 and free layer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:15 |
| S112 | 80 | S111 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:15 |
| S113 | 0 | "6,023,395.pn", | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:17 |
| S114 | 2 | "6,023,395" pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:17 |
| S115 | 118 | ["3623038" "5018037" "5390061" "5416353" "5432734" "5465185" "5528440" "5695864" "5726837" "5729410" "5898547").PN. OR ["6023395").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 10:17 |
| S116 | 80 | S111 and domain near (wall or spacer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; | | ON | 2009/07/13 10:20 |

| | | | IBM_TDB | | | |
|------|------|--|---|-----|----|---------------------|
| S117 | 80 | S111 and domain near5 (wall or spacer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:20 |
| S118 | 116 | S111 and domain same (wall or spacer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 10:31 |
| S119 | 320 | S100 and (domain wall or spacer) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:03 |
| S120 | 208 | S119 and free layer | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:04 |
| S121 | 3796 | 365/158,173,171.ccls. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:46 |
| S122 | 2362 | S121 and ferromagnet\$5 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/10 11:46 |
| S123 | 1748 | S122 and anti\$1parallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:46 |
| S124 | 489 | S123 and domain | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:46 |
| S125 | 147 | S124 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 11:47 |
| S126 | 2388 | (antiparallel with ferromagnetic) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 14:24 |
| S127 | 184 | S126 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 14:24 |
| S128 | 137 | S126 and (domain wall and mov\$5) | US-PGPUB; USPAT; EPO; JPO; DERWENT; | | ON | 2009/07/13 14:25 |

| | | | IBM_TDB | | |
|------|------|---|--|------|---------------------|
| S129 | 142 | S126 and (domain wall and (mov\$5 or motion or displac\$5)) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 14:25 |
| S130 | 135 | S129 and current | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 14:26 |
| S131 | 61 | S129 and (domain same current) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 14:26 |
| S132 | 4463 | (antiparallel with \$4magnetic) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 14:28 |
| S133 | 172 | S132 and (domain wall and (mov\$5 or motion or displac\$5)) and (domain same current) | US-PGPUB; ADJ USPAT; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 14:28 |
| S134 | 20 | ("3818328" "5206590" "5432373" "5541868" "5629549" "5664566" "5721654" "5793697" "5872368" "5929636" "6031273" "6064083" "6114719" "6237987").FN. OR ("6624490").URFN. | US-PGPUB; ADJ USPAT; USOCR | ON | 2009/07/13 14:33 |
| S135 | 1 | "20030209770" and "same" | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | I ON | 2009/07/13 14:38 |
| S136 | 1751 | emitter and base and collector and ferromagnetic | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 15:07 |
| S137 | 84 | S136 and ((emitter or base or collector) same antiparallel) | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 15:08 |
| S138 | 41 | S137 and domain | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ON | 2009/07/13 15:10 |
| S139 | 11 | S137 and domain near10 wall | US-PGPUB; ADJ USPAT; | ON | 2009/07/13 15:11 |

| | | | USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | | | |
|------|-----|--|--|-----|----|---------------------|
| S140 | 2 | "6005798".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:13 |
| S141 | 142 | S126 and (domain wall and (mov\$5 or motion or displac\$5 or creep)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:16 |
| S142 | 14 | S129 and (domain wall with current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:18 |
| S143 | 51 | S129 and Barkhausen | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:19 |
| S144 | 284 | S126 and ((domain wall and (mov\$5 or motion or displac\$5)) or Barkhausen) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:20 |
| S145 | 249 | S128 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) or Barkhausen) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:24 |
| S146 | 81 | S128 and (((domain wall with (mov\$5 or motion or displac\$5 or shift)) or Barkhausen) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:24 |
| S147 | 20 | S126 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:33 |
| S148 | 63 | *5768181* | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 15:38 |
| S149 | 2 | [*] 5768181*,pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; | ADJ | ON | 2009/07/13 15:38 |

| | | | IBM_TDB | | | |
|------|------|---|---|-----|----|---------------------|
| S150 | 51 | ("5173873" "5465185" "5640343").PN. OR ("5768181").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 15:39 |
| S151 | 6 | S150 and domain wall | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 15:40 |
| S152 | 43 | (antiparallel with ferromagnetic) and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same2 current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:03 |
| S153 | 76 | (antiparallel same ferromagnetic) and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same2 current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:34 |
| S154 | 43 | (antiparallel same ferromagnetic) and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:34 |
| S155 | 62 | (anti\$1parallel with ferromagnetic) and ((domain wall same (mov\$5 or motion or displac\$5 or shift)) same2 current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:41 |
| S156 | 28 | (anti\$1parallel with ferromagnetic) and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:41 |
| S157 | 9842 | 257/81,82,116,117,432-437,457,459,749,421-422.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:42 |
| S158 | 19 | S157 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:42 |
| S159 | 10 | S157 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) and antiparallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:44 |
| S160 | 8 | S157 and S153 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:44 |
| S161 | 7246 | 257/295,E43.001-E43.007,E27.005- E27.006,E27.008,E29.164,E29.167,E29.272,E29.323.ods. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:51 |
| S162 | 31 | S161 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) and antiparallel | US-PGPUB; USPAT; | ADJ | ON | 2009/07/13 16:51 |

| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
|------|-----|--|---|-----|----|---------------------|
| S163 | 104 | 257/E27.006 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2009/07/13 16:52 |
| S164 | 313 | 257/E27.006.cds. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | | ON | 2009/07/13 16:53 |
| S165 | 36 | 257/E27.006.cds. and anti\$1parallel | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:53 |
| S166 | 1 | S165 and domain wall | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 16:54 |
| S167 | 86 | magnet\$6 and (anti\$1parallel same2 ferromagnet\$6) and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 18:09 |
| S168 | 156 | magnetoresistive and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 18:12 |
| S169 | 0 | "360".ccls. and ferromagnetic\$5 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 18:15 |
| S170 | 83 | "360" clas. and ferromagnetic\$5 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 18:15 |
| S171 | 118 | anti\$1parallel and ferromagnetic\$5 and ((domain wall with (mov\$5 or motion or displac\$5 or shift)) same current) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/13 18:16 |
| S172 | 46 | (US-20030209770-\$ or US-20010007532-\$ or US-2004008990-5 or US-20060109999-\$ or US-20060109999-\$ or US-20090135644-\$ or US-20030197984-\$ or US-20090135644-\$ or US-20030197984-\$ or US-20080080234-\$ or US-20070278603-\$) did. or (US-7005852-\$ or US-5331728-\$ or US-4103315-\$ or US-3376552-\$ or US-5331728-\$ or US-4103315-\$ or US-5390061-\$ or US-6807031-\$ or US-546647-\$ or US-6437949-\$ or US-6807031-\$ or US-574805-\$ or US-5788181-\$ or US-5788187-\$ or US-5784505-\$ or US-5788181-\$ or US-574805-\$ or US-5788181-\$ or US-574805-\$ or US-5788181-\$ or US-5843273-\$ or US-5343422-\$ or US-5702831-\$ or US-6834005-\$ or US-5702831-\$ or US-6834005-\$ or US-5702831-\$ or US-6834005-\$ or US-5702831-\$ or US-6834005-\$ or US-5701223-\$ or US-5702831-\$ or US-5701223-\$ or US-570123-\$ or US-5 | US-PGPUB; USPAT | ADJ | 6 | 2009/07/13 18:18 |

| | | 5729410-\$ or US-6090498-\$). did. or (US-6438026-\$ or US-6023395-\$ or US-7359163-\$ or US-7184300-\$ or US-7110287-\$ or US-5923504-\$ or US-565695-\$ or US-5747859-\$ or US-56838-\$ or US-5958611-\$ or US-6812537-\$). did. | | | | |
|------|-----|---|--|-----|-----|---------------------|
| S173 | 30 | S172 and domain wall | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:18 |
| S174 | 12 | S172 and (domain wall same current) | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:19 |
| S175 | 779 | (domain wall same current) | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:22 |
| S176 | 372 | S175 and memory | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:22 |
| S177 | 266 | S176 and ferromagnetic | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:22 |
| S178 | 154 | S177 and anti\$1parallel | US-PGPUB; USPAT | ADJ | ON | 2009/07/13 18:22 |
| S179 | 15 | ["20020105827" "20030007398" "20030059588" "20040100855" "5695864" "6201673" "6532164" "6603678" "6649960" "6829161").FN. OR ["7110287").URPN. | US-PGPUB; USPAT; USOCR | ADJ | ON | 2009/07/13 18:27 |
| S180 | 2 | [*] 6005798*.pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2009/07/16 09:55 |
| S181 | 50 | IUS-20030209770-\$ or US-20010007522-\$ or US-20040089905-\$ or US-20040089905-\$ or US-20090132694-\$ or US-20090135644-\$ or US-20030197984-\$ or US-2005013600-\$),did. or (US-7005852-\$ or US-6713195-\$ or US-6724652-\$ or US-5376552-\$ or US-5317268-\$ or US-45134533-\$ or US-3576552-\$ or US-5317268-\$ or US-5340898-\$ or US-5134533-\$ or US-5390061-\$ or US-6807031-\$ or US-6734605-\$ or US-5734605-\$ or US-5734654-\$ or US-5734605-\$ or US-573463-\$ or US-5836032-\$ or US-57347653-\$ or US-5836035-\$ or US-57347653-\$ or US-5868838-\$ or US-586895-\$ or US-57359163-\$ or US-57359163-\$ or US-57359163-\$ or US-593661-\$ or US-5747653-\$ or US-5868838-\$ or US-5938661-\$ or US-5747659-\$ or US-680838-\$ or US-5938661-\$ or US-5936632-\$ or US-6808579-\$ or US-593661-\$ or US-5936632-\$ or US-6808579-\$ or US-6829161-\$ or US-68005796-\$) old. | US-PGPUB; USPAT | ADJ | ON | 2011/03/26 18:00 |
| S182 | 4 | ohno.in. and current injection magnetic domain wall | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | OFF | 2011/09/13 15:01 |
| S183 | 152 | 365/173 and domain wall | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | OFF | 2011/09/13 15:01 |

| S184 | | 365/173.ccls. and domain wall | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OFF | 2011/09/13 15:02 |
|------|-----|-------------------------------|--|-----|---------------------|
| S185 | 198 | 365/158.cds. and domain wall | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OFF | 2011/09/13 15:06 |
| S186 | 2 | *20030117837* | US-PGPUB; ADJ USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OFF | 2011/09/13 15:10 |

9/23/2011 5:49:35 PM

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